WHAT IS CLAIMED IS:

1. A commodity data management method, comprising:

inputting purchase commodity data of each customer in time series at the time the customer selects the commodity, and

determining a tendency of purchase commodity of each customer according to the purchase commodity data of each customer inputted in time series.

2. The commodity data management method according to claim 1,

at the inputting step, further comprising:

detecting a location of the customer associated with inputted purchase commodity data.

3. The commodity data management method according to claim 2,

further comprising:

correspondingly storing an identifier of the customer, an identification code of a purchase commodity, the location data of the customer, and an input time of the purchase commodity data in a purchase commodity table.

4.　The commodity data management method according to claim 3,

at the determining step, further comprising:

selecting a pair of identification codes of purchase commodities of which a difference between two input times is below a threshold from the purchase commodity table, and

storing the pair of identification codes of purchase commodities in a data analysis result table.

5.　The commodity data management method according to claim 4,

further comprising:

when the purchase commodity data of the customer is newly inputted at the inputting step,

deciding whether an identification code of the purchase commodity newly inputted matches one of the pair of identification codes of purchase commodities in the data analysis result table.

6.　The commodity data management method according to claim 5,

further comprising:

if the identification code of the purchase commodity newly inputted matches one of the pair of identification codes of purchase commodities,

displaying an advertisement corresponding to the other of the pair of identification codes of purchase commodities to the customer.

7. The commodity data management method according to claim 6,

at the displaying step, further comprising:

displaying a location corresponding to the other of the pair of identification codes of purchase commodities to the customer according to a present location of the customer detected at the detecting step.

8. The commodity data management method according to claim 3,

further comprising:

when the purchase commodity data is inputted at the inputting step;

displaying a question related to the purchase commodity to the customer, and

inputting an answer of the customer for the question.

9. The commodity data management method according to claim 3,

further comprising:

when a payment command is inputted at the inputting step,

displaying a list and a total price of purchased commodities inputted until then to the customer.

10. A commodity data input and output apparatus, comprising:

an input unit configured to input purchase commodity data of each customer in time series at the time the customer selects the commodity; and

a communication unit configured to send the purchase commodity data of each customer to a commodity data management apparatus.

11. The commodity data input and output apparatus according to claim 10,

further comprising:

a location detection unit configured to detect a location of the customer associated with inputted purchase commodity data.

12. The commodity data input and output apparatus according to claim 11,

wherein said communication unit sends an identification code of said commodity data input and

output apparatus, and the location data of the customer with the purchase commodity data to said commodity data management apparatus.

13. The commodity data input and output apparatus according to claim 12,

wherein said communication unit receives commodity presentation data usable for the customer's next purchase from said commodity data management apparatus.

14. The commodity data input and output apparatus according to claim 13,

further comprising:

a display unit configured to display the commodity presentation data to the customer.

15. The commodity data input and output apparatus according to claim 14,

when said input unit inputs a payment command from the customer,

wherein said communication unit sends the identification code of said commodity data input and output apparatus, and a completion code to said commodity data management apparatus.

16. The commodity data input and output apparatus according to claim 15,

when said communication unit receives a list and a total price of purchased commodities from said commodity data management apparatus,

wherein said display unit displays the list and the total to the customer.

17. The commodity data input and output apparatus according to claim 16,

when said communication unit receives a question related to the purchase commodity from said commodity data management apparatus,

wherein said display unit displays the question to the customer.

18. The commodity data input and output apparatus according to claim 17,

when said input unit inputs an answer to the question from the customer,

wherein said communication unit sends the answer and an identification code of the purchase commodity to said commodity data management apparatus.

19. A method for inputting and outputting

commodity data, comprising:

inputting purchase commodity data of each customer in time series at the time the customer selects the commodity; and

sending the purchase commodity data of each customer to a commodity data management apparatus.

20. A computer program product for use with a computer, comprising:

a computer usable medium having computer readable program code embodied in said medium for causing said computer to input and output commodity data, said computer readable program code having:

computer readable program code to input purchase commodity data of each customer in time series at the time the customer selects the commodity; and

computer readable program code to send the purchase commodity data of each customer to a commodity data management apparatus.

21. A commodity data management apparatus, comprising:

a communication unit configured to receive purchase commodity data of each customer in time series at the time the customer selects the

commodity from a commodity data input and output apparatus; and

a data analysis unit configured to determine a tendency of purchase commodity of each customer according to the purchase commodity data of each customer received.

22. the commodity data management apparatus according to claim 21,

wherein said communication unit receives an identification code of the commodity data input and output apparatus, an identification code of a commodity, and location data of the customer purchasing the commodity.

23. The commodity data management apparatus according to claim 22,

further comprising:

memory configured to correspondingly store the identification code of the commodity data input and output apparatus, the identification code of the commodity, the location data of the customer, and a receiving time in a purchase commodity table.

24. The commodity data management apparatus according to claim 23,

wherein said data analysis unit selects a pair of identification codes of purchase commodities of which an interval between two receiving times is below a predetermined period from the purchase commodity table, and

wherein said memory stores the pair of identification codes of purchase commodities in a data analysis result table.

25.   The commodity data management apparatus according to claim 23,

when said communication unit receives the identification code of the commodity data input and output apparatus, and a completion code,

wherein said data analysis unit extracts a list of purchase commodities corresponding to the identification code of the commodity data input and output apparatus from the purchase commodity table, and calculates the total of the purchase commodities; and

wherein said communication unit sends the list of purchase commodities and the total of the purchase commodities to said commodity data input and output apparatus.

26.   The commodity data management apparatus

according to claim 24,

when said communication unit newly receives an identification code of purchase commodity,

wherein said data analysis unit decides whether the identification code of purchase commodity matches one of the pair of identification codes of purchase commodities in the purchase commodity table.

27. The commodity data management apparatus according to claim 26,

wherein said memory stores an advertisement corresponding to the identification code of each commodity.

28. The commodity data management apparatus according to claim 27,

if the identification code of purchase commodity matches one of the pair of identification codes of purchase commodities,

wherein said communication unit sends the advertisement corresponding to the other of the pair of identification codes and the commodity name to the commodity data input and output apparatus.

29. The commodity data management apparatus according to claim 26,

wherein said memory previously stores location data corresponding to the identification code of each commodity.

30. The commodity data management apparatus according to claim 29,

if the identification code of purchase commodity matches one of the pair of identification codes of purchase commodities,

wherein said communication unit sends the location data corresponding to the other of the pair of identification codes and the commodity name to the commodity data input and output apparatus.

31. The commodity data management apparatus according to claim 26,

wherein said memory previously stores a question corresponding to the identification code of each commodity, and

wherein said communication unit sends the question corresponding to the identification code of purchase commodity received to the commodity data input and output apparatus.

32. The commodity data management apparatus according to claim 31,

when said communication unit receives an answer
for the question from the commodity data input and
output apparatus,

wherein said memory correspondingly stores the
answer and the identification code of the purchase
commodity in an answer table.

33. A method for managing commodity data,
comprising:

receiving purchase commodity data of each
customer in time series at the time the customer
selects the commodity from a commodity data input
and output apparatus; and

determining a tendency of purchase commodity of
each customer according to the purchase commodity
data of each customer received.

34. A computer program product for use with a
computer, comprising:

a computer usable medium having computer
readable program code embodied in said medium for
causing said computer to manage commodity data, said
computer readable program code having:

computer readable program code to receive
purchase commodity data of each customer in time
series at the time the customer selects the

— 44 —

commodity from a commodity data input and output

apparatus; and

computer readable program code to determine a

tendency of purchase commodity of each customer

according to the purchase commodity data of each

customer received.